

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A wireless transmit/receive unit (WTRU) for infrastructure communication in a wireless network via network base stations and for peer-to-peer communications with other such WTRUs comprising:

transceiver components that are configured for selective operation in an infrastructure communication mode for infrastructure communication with a network base station and in a peer-to-peer communications mode for peer-to-peer communications with other WTRUs; and

a transceiver controller configured to selectively control peer-to-peer mode communications with other WTRUs based on communication signals received in infrastructure communications with a network base station and configured with selected default control limits for peer-to-peer mode communications that can be overridden based on communication signals received in infrastructure communications with a network base station.

2. (cancelled)

3. (currently amended) The invention of claim 2 1 wherein the transceiver controller selected default control limits for peer-to-peer mode communications include a maximum duration of a peer-to-peer communication and a restriction as to types of data traffic permitted in peer-to-peer communications.

4. (original) The invention of claim 1 wherein the transceiver components include a wireless local area network (WLAN) modem for the peer-to-peer communications with other WTRUs.

5. (original) The invention of claim 1 wherein the transceiver controller is configured to control the transceiver components to switch between infrastructure communication mode and peer-to-peer communication mode based on Quality of Service criteria.

6. (original) The invention of claim 1 wherein the WTRU is a mobile unit and the transceiver controller is configured to control the transceiver components to switch between infrastructure communication mode and peer-to-peer communication mode based on an estimate of the geographic location of the mobile unit.

7. (original) The invention of claim 6 further comprising a Global Positioning System (GPS) for generating the estimate of the geographic location of the mobile unit.

8. (original) The invention of claim 1 wherein the transceiver components are configured to selectively function in a relay mode to relay a communication between a network base station via infrastructure communication mode and another WTRU via peer-to-peer communication mode, and the transceiver controller is configured to control the transceiver components to function in the relay mode to based on Quality of Service criteria.

9. (original) The invention of claim 1 wherein the transceiver controller is configured to control each peer-to-peer mode communications based on settings received in infrastructure communications with a network base station.

10. (original) The invention of claim 1 wherein the transceiver controller is configured with selected default control limits for peer-to-peer mode communications.

11. (currently amended) A method of wireless communication for a wireless transmit/receive unit (WTRU) having transceiver components that are configured for selective operation in an infrastructure communication mode for infrastructure communication in a wireless network via a network base station and in a peer-to-peer communications mode for peer-to-peer communications with other WTRUs also configured for infrastructure communication in the wireless network, the method comprising ~~the step of~~:

selectively controlling peer-to-peer mode communications with other WTRUs based on communication signals received in infrastructure communications with a network base station; and

using selected default control limits for peer-to-peer mode communications
and overriding said defaults based on communication signals received in
infrastructure communications with a network base station.

12. (cancelled)

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13. (currently amended) The method of claim 12 11 wherein a maximum duration of a peer-to-peer communication and a restriction as to types of data traffic permitted in peer-to-peer communications are included as the default control limits used for peer-to-peer mode communications.

14. (original) The method of claim 11 wherein a wireless local area network (WLAN) modem is used for the peer-to-peer communications with other WTRUs.

15. (original) The method of claim 11 wherein the transceiver components are switched between infrastructure communication mode and peer-to-peer communication mode based on Quality of Service criteria.

16. (original) The method of claim 11 wherein the WTRU is a mobile unit and the transceiver components are switched between infrastructure communication mode and peer-to-peer communication mode based on an estimate of the geographic location of the mobile unit and/or an estimate of congestion.

17. (original) The method of claim 16 wherein the WTRU includes a Global Positioning System (GPS), the method further comprising the step of using the GPS for generating the estimate of the geographic location of the mobile unit and sending test packets from the WTRU to generate an estimate of congestion.

18. (original) The method of claim 11 wherein the transceiver components are configured to selectively function in a relay mode to relay a communication between a network base station via infrastructure communication mode and

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another WTRU via peer-to-peer communication mode, the method further comprising the step of controlling the transceiver components to function in the relay mode based on Quality of Service criteria.

19. (original) The method of claim 11 using settings received in infrastructure communications with a network base station to control each peer-to-peer mode communication.

20. - 33. (cancelled).